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MONTANA DEPARTMENT OF HEALTH
AND ENVIRONMENTAL SCIENCES

Monthly Activities Report
of the Air Quality Bureau

August, 1978

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1. Highlights

Began Bureau work on the network review required by EPA.

Began setting up the dichotomous particulate samplers which will be used in the MAPS study.

2. Ambient Air Quality Network

a. Standards Exceeded

SO_2	Mill Creek	Hiway Junction	Lincoln School
Highest 24-hour avg.	0.09	0.16	0.20
Highest 1-hour avg.	0.70	0.86	1.00
# of 1-hr. avg. over 0.25	14	18	31

NO_2-Lincoln School

Highest 1-hr. avg. 0.020
Highest 24-hr. avg. 0.004

SO_2 - Anaconda smelter vicinity

State 1-hour	100
State 24-hour	20
Federal 24-hour	11
Federal 3-hour	14
Total	145

Hi-vol standards exceeded

City	Station	Date	150 ug/m^3 State Std.	200 ug/m^3 Fed. Std.
Billings	Central Park W.	8/7	166	
		8/9	196	
		8/11	193	
Col. Falls	Anders	8/6	375	375
		8/12	200	200
		8/30	163	
Kalispell	Sherman	8/2	150	
		8/30	294	294
Libby	Brown	8/7	174	
		8/28	193	

b. Air Stagnation Advisories - None in August

c. Laboratory Status

Total Determinations for Month	2687
Total Samples for Month	484

3. Permits and Tax Credits

a. Construction Permits - received

Zook Brothers, Pondera County, portable gravel crusher
Gus Albert, Roosevelt Co., portable gravel crusher
Gus Albert, Roosevelt Co., portable hot mix asphalt plant
Plum Creek Lumber, Columbia Falls, high pressure air system
R. J. Studer & Sons, Roosevelt Co., hot mix asphalt plant
Zook Brothers, Pondera Co., portable hot mix asphalt plant
Evans Products, Missoula, ducting and booster fan at Riley boiler
VA Center, Fort Harrison, incinerator
McIntyre Construction, Jefferson Co., portable hot mix plant
McIntyre Construction, Jefferson Co., portable gravel crushing plant
McIntyre Construction, Big Horn Co., portable gravel crushing plant
McIntyre Construction, Big Horn Co., portable gravel crushing plant
McIntrye Construction, Big Horn Co., portable hot mix asphalt plant
Downtown Mall, Havre, incincerator
Wickens Brothers, Carbon Co., portable gravel crushing plant
Western Vermiculite Company, Ravalli Co., dust collector

Construction Permits - approved

Beartooth Coal Company, Carbon Co., conveyor belts, coal crusher
Exxon, Billings, refinery, floating roof cover $243,800
Robert Tindall, Meagher Co., portable hot mix asphalt plant
Meyer Construction, Broadwater Co., portable asphalt hot mix plant
Meyer Construction, Broadwater Co., portable gravel crusher
Zook Brothers, Pondera Co., portable gravel crusher
Gus M. Albert, Roosevelt Co., portable gravel crusher
Gus M. Albert, Roosevelt Co., portable hot mix asphalt plant
R. J. Studer & Sons, Roosevelt Co., hot mix asphalt plant
Zook Brothers Construction, Pondera Co., portable hot mix asphalt plant
VA Center, Fort Harrison, incincerator
McIntyre Construction, Big Horn Co., portable gravel crusher
McIntyre Construction, Big Horn Co., portable gravel crusher
McIntyre Construction, Big Horn Co., portable hot mix asphalt plant
Downtown Mall, Havre, incinerator
Wickens Brothers, Carbon Co., portable gravel crushing plant

c. Tax Credits

Twenty applications from Exxon, Cenex, and Marty Perga are being reviewed. Montana Power Company were granted class seven tax status on Colstrip Units 1 and 2. Total amount approved was in excess of $10,000,000 and dealt with the flyash ponding system.

4. Variance Status

a. Current

Anaconda Aluminum Company, Columbia Falls, F^- and particulate, expired June 30, 1978, hearing scheduled for September 8, 1978.

b. New - None

5. Enforcement Actions

a. Citations

Brand S Lumber, Livingston, 780816-DH-1, Tepee Burner in violation of rule 16-2.14(1)-S14030 (Wood Waste Burners).

b. Notice of Violation

Evans Products, Plywood Division, Bonner, MT - N780831-JB-1 and N780831-JB-2 #4 veneer dryer in violation of rule 16-2.14(1)-S1460 (Visible Air Contaminants).

c. Order for Corrective Action - Evans Products, as above, final date 6/30/79

d. Court Actions - None

6. Tepee Burner and Open Burning

No. at start	41
New starts	0
Shutdowns	0
No. at end	41

Open Burning Permits

Kalispell Office	52	Sanders County	53
Cascade County	12	Yellowstone County	22
Lake County	5	Rest of State	321
Missoula County	6	Total	471

7. Source Tests Performed

A. Agency Source Tests - None

b. Non-agency tests

Hoerner-Waldorf monthly report submitted, not yet reviewed.

ASARCO, Inc. conducted simultaneous source tests on acid and sinter plant facilities. These are fulfilling provisions of SIP in regard to performance testing.

8. Field Investigations

ASARCO, Inc., Helena, inspection,
Brand S Lumber, Livingston, inspection
Glacier Park, prescribed burn, inspection
Olney, landfill, inspection of woodwaste area
Border Lumber, West Kootenai, inspection
Landfill, Plains, putting out fire during inspection
Dupuis Lumber, Polson, documentation
Cominco, Garrison, fugitive dust-haul road, inspection
Valley Center Road, Bozeman, fugitive dust, met with county commissioners

9. Complaints

Exxon, Billings, white plume, pungent odor, investigation (3 complaints)
Conoco, Billings, gas odors, investigation
Great Western Sugar, Billings, odor, investigation
Montana Power, Billings, dark plume, dust, investigation (5 complaints)
Empire Sand and Gravel, Billings, dark plumes, investigation
Individual, Kalispell, burning garbage, corrected
Glasgow Packing Company, Glasgow, odor, accident due to equipment failure
Helena Sewage Treat Plant, odors, investigation, City is trying to solve problem (2 complaints)
Brand S Lumber, Livingston, heavy smoke and particulate fallout, investigation (6 complaints, 3 investigations)
Anaconda Lime Quarry, Anaconda, excessive dust, investigation
ASARCO, East Helena, plants dying, investigation, samples taken
Helena, dusty streets, investigation
Auto shops, Hamilton, removing catalytic converters, public will be informed through public information program
Individual, East Helena, open burning, investigation
Anaconda Company, Anaconda, smoky, SO_2 taste, plant upset, investigation continuing
ASARCO, East Helena, heavy plume, investigation (3 complaints)
Unknown, East Helena, dead cow, liver sent to Bozeman for lead analysis

10. Data Processing Services

a. Ambient Data Summary - See attached

b. Emission Inventory Status

Delays in processing the inventory updates were caused by a system crash at the Hiway Department computer. Several programs were lost in the crash and will have to be recreated.

c. Prevention of Significant Deterioriation

Worked on proposed air quality rule and public presentation for the rule.

d. Modeling

Reviewed Anaconda Company model done by EPA and related information.

11. Environmental Impact Statements

a. Agency Impact Determinations - None

b. Other Agency EIS' Reviewed:

State Lands and U.S.G.S., NERCO's Spring Creek Mine
State Lands, MONTCO
ASARCO-Troy, State Lands

12. Status of Studies, Contracts and Reports

ASARCO-Troy, background complete, study ended and reports complete
Network Review (SAMWG,) EPA, project just beginning
Poplar River Study continuing to operate
Flathead Study continuing to operate, equipment being installed
MAPS, meteorology studies operating at full operation
Montana Foundation for Medical Care nearly completed data collection
Historical Emission Inventory feasibility study completed
Emission Inventory Update and Improvement Phase I completed;
Phase II begun

13. Schools and Training - None

14. Public Hearings and Meetings

a. Public Hearings Held - None

b. Meetings Attended:

Peabody Mine, State Lands
Anaconda Aluminum, progress on compliance schedule
Hearings Officer, regarding hearing procedures on new rules
Environmental Information Center, Helena, regarding SIP/MAAQS workshops
Yellowstone County Planning, FHWA, Dept. of Highways, regarding Billings SIP revision
SIP meeting, Helena, attended by EPA, local air agency staff, Dept. of Transportation
Industry advisory committee, Helena, regarding rule revisions
State Lands, MONTCO and Peabody
State Lands, Western Energy Company, Helena, EIS for new town of Colstrip
Anaconda Company, Anaconda, audit Hiway Jct. station
Exxon, coker opacity problem
Burlington Northern, Helena, regarding variance request
Park County Refuse Board, Livingston, landfill
MAPS Data Acquisition, Helena
USFS Fire Management, Helena
Smoke Management, Missoula, airshed coordinators
Butte/Silver Bow Commissioners, Butte, regarding SIP
Gallatin County Commissioners, Bozeman, regarding Valley Center Road fugitive emissions

c. Intra-Staff Meetings

Air Quality Bureau staff meetings
Section Head meetings
MAAQS meetings
MAPS meetings

15. Public Information Requests

Rules 14
General 7
Clean Air Act 4
Open burning pamphlets - 54

Sent out proposed NSPS rule to 375 persons
Sent out Working Papers for MAAQS to approximately 150 persons

16. N.A.

17. Other:

None

MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

MONTHLY SUMMARY OF AIR QUALITY DATA

July 1978

Pollutant: Miscellaneous Indicators — Units:

AQCR	AREA: Site Location	HIGH READING: Current Month	HIGH READING: Year-to-Date	HIGH READING: Running Year	ARITHMETIC AVER.: Year-to-Date	ARITHMETIC AVER.: No. of Mons. of Data	Comments
	Fluoride Papers - Mg/sq. cm/30 days						
142	ESE Stauffer Silver Bow Co	3.300	3.300	3.300	3.300	1	
	S of Stauffer Silver Bow Co.	2.520	2.520	2.520	2.520	1	
	Stauffer Pond Silver Bow Co.	2.070	2.070	2.070	2.070	1	
	Kanany West Silver Bow Co.	1.120	1.120	1.120	1.120	1	
144	Dehlbees Mt Box Flathead Co.	1.360	1.360	1.360	1.066	7	
	Anaconda South Flathead Co.	4.720	21.130	27.480	12.299	7	
	Glacier Park #1 Glac.Nat.Park	0.610	0.640	0.640	0.486	7	
	Glac Park #2 Glac.Nat.Park	0.690	0.690	0.690	0.384	7	
	Glacier Park #9 Glac.Nat.Park	0.560	0.720	0.720	0.544	7	
	Fluoride Plates - Mg/sq cm/30 days						
144	Anaconda South Flathead Co.	6.880	22.980	37.850	16.130	7	
	Trailer NAAC Flathead Co.	2.820	2.820	2.820	1.550	7	
	Glacier Park #1 Glac.Nat.Park	0.720	0.840	0.840	0.558	6	
	Glacier Park #2 Glac.Nat.Park	0.580	0.690	0.690	0.387	7	
	Glacier Park #9 Glac.Nat.Park	0.430	0.670	0.670	0.427	7	

Pollutant: Miscellaneous Bubbler Data — Units: ppm

AQCR	AREA: Site Location	HIGH READING: Current Month	HIGH READING: Year-to-Date	HIGH READING: Running Year	ARITHMETIC AVER.: Year-to-Date	ARITHMETIC AVER.: No. of Mons. of Data	Comments
	Sulfur Dioxide						
143	Scobey Daniels Co	0.0	0.0	0.0	0.0	7	
	Fort Peck McCone Co	0.0	0.0	0.0	0.0	7	
	Lame Deer Rosebud Co.	0.0	0.0	0.0	0.0	1	
	Nitrogen Dioxide						
143	Scobey Daniels Co	0.005	0.005	0.005	0.000	7	
	Fort Peck McCone Co	0.0	0.0	0.0	0.0	7	
	Lame Deer Rosebud Co	0.0	0.0	0.0	0.0	1	

Pollutants: Miscellaneous Indicators — Units

AQCR	AREA: Site Location	HIGH READING: Current Month	HIGH READING: Year-to-Date	HIGH READING: Running Year	ARITHMETIC AVER.: Year-to-Date	ARITHMETIC AVER.: No. of Mons. of Data	Comments
	Dust Fall - tons/sq. mile						
141	Mountain States Great Falls Fire Sta. #1	30.60	31.29	80.64	19.99	5	
	Great Falls 10th Ave. South	19.35	20.99	31.17	15.26	5	
	Great Falls Sulfation Rate	---	---	***	---	---	
140	3/8 Mi. NE Coop Billings	0.740	3.340	4.350	1.933	6	
	S. of Laurel Billings	0.550	2.800	2.800	1.220	6	
	Hi-Ball Trucking Billings	0.670	1.890	1.890	1.200	7	
141	Stock Car Track Great Falls	0.095	0.184	0.498	0.091	6	
	Phillips Ref N1 Great Falls	0.089	0.554	0.543	0.169	4	
	Philips Ref E Great Falls	0.169	0.515	0.515	0.270	6	
142	Microwave East Helena	---	---	**	---	---	
	East Stack Sta East Helena	---	---	**	---	---	
	Broady Ranch East Helena	0.180	0.460	0.480	0.180	7	
	212 E. Pacific East Helena	0.320	0.400	1.170	0.275	6	
	525 Prickly Pear East Helena	0.240	0.240	0.240	0.142	4	

Pollutant: Total Suspended Particulate — Units: ug/cu meter

AQCR	AREA: Site Location	HIGH READING: Current Month	HIGH READING: Year-to-Date	HIGH READING: Running Year	ARITHMETIC AVER.: Year-to-Date	ARITHMETIC AVER.: No. of Mons. of Data	Comments
140	Morton-Becker Big Horn Co	---	---	**	---	---	
	Warren Ranch Big Horn Co	72	72	108	21.6	7	
	Lockwood School Billings KGHL	81	135	166	53.7	7	
	Billings City Hall	69	87	87	38.2	7	
	Billings Grand Ave School	110	175	175	79.5	7	
	Billings Central Park #1	96	171	171	62.4	7	
	Billings Central Park #2	183	183	183	91.1	3	1 exc.Fed.Sec.Std
	Billings Laurel Jr. High	145	146	146	76.0	3	
	Laurel	105	105	106	44.5	7	
141	Hospital Roof Great Falls	136	136	136	48.9	7	
	Fire Sta #1 Great Falls	125	125	151	71.9	7	
142	HiWay Jct Anaconda	42	94	161	28.5	7	
	Lincoln School#1 Anaconda	52	65	65		4	
	Lincoln School#2 Anaconda	65	77	77	33.0	5	
	Greeley School Butte	81	195	233	79.2	7	

*** - data unavailable at time of report
** - no valid samples submitted

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MONTANA DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES

Monthly Summary of Air Quality Data

July 1978

Pollutant: Total Suspended Particulate Units: ug/cu meter

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
142	Gilman Constr Butte			*			
	Richer Res Silver Bow Co	37	53	53	20.5	7	
	Tierney Res Silver Bow Co	62	68	89	26.5	7	
	Hebgen Park #1 Butte	83	133	133	50.4	4	
	Hebgen Park #2 Butte	78	106	106	53.5	4	
	Dr. Canty Res Butte	61	106	106	49.5	3	
	Microwave Jefferson Co.	50	52	64	24.9	7	
	212 E. Pacific Lewis & Clk Co	130	170	192	90.3	7	
	Kober Res Three Forks	255	255	309	78.8	7	
	Cogswell Bldg#1 Helena	68	234	234	58.8	7	
143	Glendive Dawson Co	46	46	46	21.0	7	
	Lane Deer Rosebud Co			**			
	Fort Peck McCone Co	30	41	53	14.3	7	
	Brandus Powder Riv.Co	33	51	51	18.4	7	
	BN Site Colstrip Lincoln Co	45	45	53	29.2	7	
	Hawson Co	40	40	40	20.4	2	

** - no valid samples submitted

Pollutant: Total Suspended Particulate Units: ug/cu meter

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
	Border Site Scobey	37	37	65	15.2	7	
144	Anders Res Col Falls	311	426	467	140.8	7	1 exc.Fed.Pr.Std 2 exc.Mt.Pri.Std
	Courthouse Roof Missoula	140	390	390	94.0	7	
	Lion's Park Missoula	113	676	676	111.3	7	
	JB Field Missoula Co	233	233	233	66.9	7	11exc.Fed.Sec.St 3 exc.Mt.Pri.Std
	Hoerner Wald #1 Missoula Co	54	144	144	30.9	7	
	Hoerner Wald #2 Missoula Co	108	135	135	33.8	7	
	Hoerner Wald #3 Missoula Co	125	125	125	26.2	7	
	Courthouse Lawn Missoula			*			
	Troy-Brown Lincoln Co	116	247	247	74.1	7	
	Troy-Sampson Lincoln Co	45	45	171	16.9	7	
	Libby-Brown Lincoln Co	188	394	394	129.9	7	1 exc.Fed.Sec.St
	Kalispell Flathead Co	154	411	411	110.5	7	1 exc.Fed.Sec.St
	McKinley Res Granite Co	68	267	267	56.7	7	

* - site no longer submitting data

Pollutant: Miscellaneous Continuous Data Units: ppm

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
	Carbon Monoxide						
140	27th & Montana Billings			*			
141	10th Ave. South Great Falls	8.90	24.50	24.50	2.575	7	
142	Alpine West Butte	1.80	12.50	14.00	0.732	7	
144	Malfunction Jct Missoula	13.00	28.00	31.60	6.571	6	8 exc Nat.8-hr St
	Hydrocarbons						
140	27th & Montana Billings			*			
	Central Park Billings	6.00	6.00	6.00	1.952	1	
142	Hebgen Park Butte			***			
144	Lion's Park Missoula			***			
	Nitrogen Dioxide						
140	27th & Montana Billings			*			
142	Hebgen Park Butte			***			
	Lincoln School Anaconda	0.01	0.01	0.01	0.004	1	
144	Lion's Park Missoula			***			

Pollutant: Miscellaneous Continuous Data Units: ppm

AQCR	AREA Site Location	HIGH READING Current Month	Year-to-Date	Running Year	ARITHMETIC AVER. Year-to-Date	No. of Mons. of Data	Comments
	Ozone						
140	27th & Montana Billings			*			
	Central Park Billings	0.09	0.09	0.09	0.027	1	1 exc.Nat.1-hr.St
142	Hebgen Park Butte			***			
144	Lion's Park Missoula			***			
	Sulfur Dioxide						
140	27th & Montana Billings			*			
	Laurel Farm Billings			***			
142	East Stack Sta East Helena			***			
	Microwave East Helena			***			
	Broady Ranch East Helena			***			
	C-Hill Anaconda			****			
	HiWay Junction Anaconda	1.08	2.00	2.00	0.045	7	2 exc.Nat.3-hr St
	Mill Creek Anaconda	0.40	1.08	1.68	0.026	7	6 exc.Mt.1-hr.St
	Lincoln School Anaconda	0.75	1.21	1.21	0.017	5	3 exc.Nat.3-hr.St

* - site no longer submitting data
*** - data not available at time of report
**** - site down for equipment repair